

Air Quality Planning for Transportation Officials: An Introduction

FHWA/Environment/Air Planning

Why should transportation officials be involved in air quality planning?

Decisions made in the air quality planning process and during SIP development can have a direct effect on transportation plans and projects. Transportation agencies need to participate fully in the air quality planning process to ensure that the decisions made reflect community priorities, including mobility.

What is the State's responsibility in air quality planning?

Each State air quality agency is tasked with determining how best to achieve the Clean Air Act's (CAA's) goals, and with developing State implementation plans (SIPs) for achieving health-based air quality standards. In some States, local air quality agencies also play a major role in air quality planning.

What is a SIP?

SIPs are collections of regulations and measures used by a State to reduce emissions from stationary, area, and mobile sources, and demonstrate attainment and maintenance of air quality standards.

What are motor vehicle emissions budgets?

A motor vehicle emissions budget is that portion of allowable emissions defined in a SIP allocated to on-road (highway and transit) vehicle emissions.

What pollutants come from transportation sources?

Transportation contributes to four of the six criteria pollutants: ozone, carbon monoxide, particulate matter, and nitrogen dioxide. New standards for ozone and particulate matter have been established by EPA that will also impact transportation planning in the future.

How is transportation information included in air quality planning?

Travel and transportation factors are a key part of on-road mobile source emissions inventory development. Transportation agencies should work with their State and local air quality agencies to ensure that the most up-to-date and accurate transportation data is used and interpreted correctly, and that travel data or projections are representative of the local area.

What role do transportation agencies play in developing travel estimates for the SIP?

As emission-reduction decisions are based on the existing contributions of all sources, an accurate portrayal of transportation emissions must be developed to ensure that transportation factors are considered appropriately. Statewide and national data may be supplemented to improve estimates of existing local travel.

How does air quality planning affect transportation conformity?

Transportation conformity ensures that Federal funding and approval goes to those transportation activities that are consistent with air quality goals, and can have a significant impact on the transportation planning process. Transportation officials must be involved in the air quality planning process to ensure that emissions inventories, emissions budgets, and transportation control measures (TCMs) are appropriate and consistent with the transportation vision of a region. If transportation conformity can not be determined, projects and programs may be delayed.

Why do transportation agencies have a vital role in establishing nonattainment area boundaries?

Nonattainment area boundaries are set by the State and EPA, and define the geographic area subject to SIP controls and conformity. Commuting and travel patterns can be an important element in setting the boundaries, and transportation agencies are the best source for this information. Currently, EPA is considering an implementation strategy for the revised ozone and particulate matter air quality standards, and will be considering boundaries for both the revised standards in the near future.

Are TCMs part of SIPs?

States have the option of choosing among a variety of emission control measures that will best serve their needs. Transportation agencies have the most thorough knowledge of the different types of transportation programs and projects that can be successfully implemented in their area. Transportation agencies will be required by Federal law to implement these TCMs if they are included in a SIP.

What happens if SIPs or measures are not implemented on schedule?

SIP delays may result in difficulties and complications for transportation planning and program implementation. Therefore, State and local transportation agencies should work with State and local air quality agencies to keep SIPs and measures current and on schedule.

Are there trade-offs?

Transportation interests must be represented to appropriately weigh the trade-offs involved in the allocation of emission reductions among different emissions sources. Transportation agencies have a strong interest in the

development of accurate and reasonable budgets because motor vehicle emissions budgets can be a controlling factor in the development of transportation plans and programs.

What are sanctions?

Sanctions are intended under the CAA as an incentive for areas to comply with air quality planning requirements. Highway sanctions may be imposed even when the SIP failure or deficiency is not transportation related. Therefore, transportation agencies have a continuing interest in all SIP activities and deadlines.

How are agencies involved?

Transportation agencies should be fully aware of interagency consultation requirements not only as they relate to transportation planning, but also as they apply to air quality planning. Full knowledge of the interagency consultation requirements will help to ensure appropriate participation by all stakeholders in both the air quality and the transportation planning processes.

How is the public involved?

Public and interest group concerns with air quality planning can surface during transportation planning and vice versa. Transportation law and the CAA require that stakeholder issues be heard and considered in both transportation and air quality planning.

What is the bottom line?

Transportation agencies should participate fully in the air quality planning process as elements of the process - including motor vehicle emissions budgets, conformity, nonattainment area boundaries, and control measures - have a direct impact on transportation planning.